DARPA-BAA-16-42

Frequently Asked Questions

Last Updated: 7/19/2016 (Version 3) – New Questions highlighted

GENERAL INFORMATION

Q: If my research is relevant in this field, but is not geared specifically to meet these goals, is there a solicitation that I can respond to?

A: Yes. DARPA/BTO has an Open solicitation (DARPA-BAA-16-33) for which responses are being collected through 28 Apr 2017.

Q: Is COL Hepburn available for a call to discuss our proposed approach?

A: COL Hepburn will not be able to provide comments or feedback on an approach presented via e-mail. The BAA describes the program including metrics in detail. If you have specific questions or require clarification, please submit them by email to <u>DARPA-BAA-16-42@darpa.mil</u>.

Q: Are Federal Laboratories and International Universities eligible to participate as collaborators in response to the BAA?

A: Per the BAA, "All responsible sources capable of satisfying the Government's needs may submit a proposal that shall be considered by DARPA." Federally Funded Research and Development Centers must adhere to the guidelines listed in Section 3.1.1 of the BAA, found on page 11. Information about Non-U.S. Organizations can be found in the following Section (3.1.2), though there are no funding restrictions applicable to any organizations responding (per Section 4.5, page 25).

Q: When is the deadline to apply for the Prometheus funding? Is it the same time as the BAA closing date on August 2, 2016?

A: Yes.

PROPOSALS

Q: Where in the proposal should we include letters of support from advisors or unpaid collaborators?

A: Volume II, along with documentation from any other team members.

Q: If the proposal contains no subcontractor, is a "Subcontracting Plan" still required?

A: No, provided there are no subcontracting possibilities.

Q: Can you provide any additional information about the required include Interdivisional Work Transfer Agreements (ITWA) or "similar arrangements" that may have been used in past grants or in response to past Broad Agency Announcements?

A: Presumably some documentation (letter of support, preliminary statement of work, etc.) will be in place to finalize the agreements between the prime organization and any subcontractor organizations. There is no prescribed template.

Q: Do the Official Transmittal Letter and SOW count towards the page limit?

A: The maximum page count for Volume 1 is 20 pages (8.5" x 11" paper, 11 point Times New Roman font, single line spacing), including all figures, tables and charts but not including the cover sheet, table of contents, statement of work, schedule and milestones, cost summary table, or appendices. A submission letter is optional and is not included in the page count.

Q: We will cite references in our proposal. Can we attach references as an appendix? Or do they count towards the 20-page length limit?

A: References should be listed in Section III - Additional Information, per the BAA.

Q: Can you confirm that the SOW, schedule, milestones and cost summary table are not included in the page count.

A: The SOW, schedule, milestones, and cost summary table are NOT included in the page count.

Q: In the BAA Proposal Format section, in describing the Cost Proposal, proposers are asked to include: "(3) An itemization of major subcontracts and equipment purchases, to include: a cost proposal as detailed as the Proposer's cost proposal." (page 23). Is there a particular budgetary threshold that is used to define "major subcontracts", for which this level of detail is required?

A: No, all proprietary subcontractor proposal documentation should be prepared at the same level of detail as that required of the prime.

Q: If an applicant proposes to participate in both TA1 and TA2, does this require two separate applications? If so, does the budget also need to be separated? If a single application is possible, are the page limits the same as for someone applying to only one task area?

A: Proposers are strongly encouraged to submit a single application if applying to both Technical Areas. The budget should clearly break out costs for each milestone within Technical Areas 1 and 2.

PROGRAM STRUCTURE

Q: Has an FAQ been posted? If so, where can I find it? I don't see it on the site with the BAA.

A: http://www.darpa.mil/work-with-us/opportunities

Q: Must a proposal addressing Technical Area 1 include all three aims to be considered responsive?

A: Yes

Q: Would a proposal focused on Technical area 1 aims 2 and 3 (collecting new data) and not using existing data be considered responsive?

A: No. "Performers will collect publically available retrospective data, and/or previously unreleased data generated by the performer, consisting of molecular profiles across multiple time points from peripheral blood of humans with known exposure to a respiratory virus". (*DARPA-BAA-16-42*, *Prometheus*, pg. 7)

Q: Many of us have samples associated with earlier challenge or cohort studies which could provide essential preliminary data that could propel the work forward. It is unclear whether such work would be consistent with the TA1 retrospective, prospective or neither.

A: Existing challenge or cohort preliminary data can be used in TA 1. However, it cannot replace the prospective studies required in aims 2 and 3 of TA 1.

Q: Do we need to propose to Technical Areas 1 and 2?

A: It is strongly encouraged that proposers apply to both Technical Areas 1 and 2. However, this is not a requirement and proposers may apply to either Technical Area or both.

Q: When can we begin our IRB and DoD human subjects research protocol review? A: Protocol submission may begin at any time. Ultimately, IRB approval, along with secondary DoD approval, will be necessary before volunteers can be enrolled prospectively. Further, proposers selected for funding should work closely with their contracting agent to ensure that arrangements for reimbursement of related costs are understood.

Q: How is the Respiratory Viral DREAM Challenge related to this program?

A: The Respiratory Viral DREAM project is a complimentary effort to this program. More information can be found at: https://www.synapse.org/#!Synapse:syn5647810/wiki/399103.

Q: Team size – does this matter? Do we need to include all expertise?

A: See evaluation criteria in the BAA and ensure the proposed team brings the necessary expertise to meet the objectives of the program.

Q: Data sharing – What is the data sharing policy? How is data collected by TA 1 performers and retrospective data going to be shared?

A: It is strongly encouraged that TA 1 and 2 performers establish data sharing agreements.

Q: Preference for challenge vs. community studies?

A: There is no preference. Studies should be designed such that the objectives of the program are met.

Q: What is an acceptable start date?

A: The anticipated start date is Nov – Dec 2016.

Q: There is an inconsistency in TA 1 metrics timeline on page 7 of the BAA.

A: The TA 1 metric of collecting, curating, and analyzing retrospective data from at least 100 individuals will be due at three months.

Q: Regarding team organization, does the lead PI of the proposal have to be from the institution that submits the grant? Does the institution that submits the grant have to also be the scientific lead?

A: Generally, yes - there would need to be a compelling reason otherwise.

COST/FUNDING

Q: Are there limits or guidelines about the amount of funding available? What is the anticipated funding range for each task area?

A: The total budget is up to \$18M. Multiple awards are expected.

Q: Regarding subcontracts, if a subcontractor is from a government laboratory are funds generally awarded directly to the government laboratory by DARPA?

A: Yes.

Q: In the BAA APPENDIX 1 - Volume II Checklist section, item 2 asks "Does your Cost Proposal include (1) a summary of cost buildup by Phase...". However, in the Program Overview, no delineation of the program by Phase is provided. Is it appropriate to propose a project and budget with a single Phase, in response to this BAA?

A: Instead of by phase, costs should be broken out by milestones for each technical area.

TECHNICAL

Q: Can we include physiological measurements in addition to molecular biomarkers to predict contagiousness?

A: Yes.

Q: Is there interest in measuring and predicting actual person-to-person transmission? A: The primary outcome measure is predicting contagiousness of a host. Proposers may offer additional outcomes measures so long as they justify relevance to the program objectives.

Q: Are non-viral diseases responsive to use as a model system if the datasets exist? A: The study of acute respiratory pathogens is encouraged

Q: For TA 2, is the predictive model expected to work for multiple pathogens or a single pathogen?

A: We require a single pathogen, but encourage the results to be broadly applicable.

Q: What is the goal for minimal data or biomarkers for prediction? What if other data are available?

A: A minimal set of biomarkers should be identified at the end of the program. No limit on initial datasets is defined in the BAA.

Q: The program appears to exclude molecular features of the pathogen. Is this interpretation correct or will the BAA consider investigation of host/pathogen or both? A: The focus of this BAA is on the identification of prognostic biomarkers for contagiousness. Although the host response to infection is emphasized in the BAA, accounting for pathogen characteristics could be acceptable as a contributory components of a biomarker pattern that predicts contagiousness.

Q: Is the primary goal of the program to identify biomarkers or is there a need as well for a device/box to detect these markers in a short time (< 1 hr.) in a near-patient setting?

A: The focus of this program is to discover biomarkers for contagiousness.

Q: If a project is based around a North America flu season, can we time the project to optimize the steps/stages with the probable flu season?

A: Yes.

Q: Could you comment on target organisms (apart from influenza)? Can you list priority organisms?

A: We encourage study of acute respiratory infections.

Q: You state the diagnostic should have 95% accuracy 24 hrs. after exposure. What is the metric for how long the assay takes to run and analyze? In other words, what is the timing of biomarker readout after infection?

A: The focus of this BAA is to discover biomarkers for contagiousness. No time-to- answer is specified, however the biomarkers selected should be amenable for further assay development.

Q: If proposers can make their own definition of contagiousness, are you concerned that a 95% accuracy will mean different capabilities for different definitions?

A: A clinically-relevant definition of contagiousness must be defined and justified in the proposal.

Q: Is it necessary to validate with multiple different viruses by 14 months?

A: Ideally, yes.

Q: Goal of 95% - can you describe the false rates expected? Precision/recall and expected uncertainty, for example.

A: Either way - false positive or false negatives as long as it is 95% accurate.

Q: Does the cohort population need to be restricted to "healthy" populations or can we draw on non-infected patient populations?

A: The selected cohort population for prospective study is up to the proposers. The proposers need to justify for selection of this population in the proposal.

Q: Do the prospective samples need to be multiple times in a single 24 hour time period or multiple times prior to onset of symptoms or/and diagnosis of contagiousness?

A: Prospective sampling should be performed at times intervals such that the analysis of the samples maximizes the likelihood of success at achieving the objectives described in the BAA.

Q: Given that the pre-symptomatic/symptomatic/contagious periods vary for individuals in community-based cohorts, will prospective samples collected from early symptomatic but non-contagious individuals be valid for TA1?

A: Yes.

Q: If the pathogen has both a chronic and acute phase, are chronically infected, asymptomatic cohorts valid for inclusion in TA1 sample collection?

A: Yes, if the proposers can explain the rationale for the use of their selected pathogen, and the transmission of the pathogen. The BAA emphasizes predictors for contagiousness in acute respiratory infection.

Q: Just as a clarification, based on the BAA, is it correct to presume that route of transmission does not matter?

A: Correct - the route of transmission is not specified in the BAA.

Q: The emphasis for Prometheus is on human samples, but there is a section on vertebrate animals. Is there enthusiasm for performing some of this work using animal models such as ferrets or swine for influenza?

A: The focus of the program is human data. Animal research may inform the study design for human studies, but the proposals should emphasize human clinical studies.

Q: Does your RFP encompass enteric infections as well?

A: The focus of the Prometheus program is to discover molecular biomarkers that predict a

host's potential to transmit and spread respiratory infectious pathogens.

Q: Is an investigation of the functional mechanism of human beta defensin type 3 (hBD-3) interaction with infectious bacteria using molecular dynamics simulations (to suggest the ideal biomarker) of interest to the Prometheus program?

A: The choice of biomarker, or combinations of markers, is not specified in the BAA. We encourage the proposers to justify their selection of biomarkers in their proposal.

Q: Parts of the BAA refer to biomarkers for infectious diseases in general and other parts refers specifically to respiratory diseases. Can you please help to clarify whether this BAA is intended for all infectious diseases or just respiratory diseases?

A: Prometheus aims to develop transformative prognostic technologies that determine the susceptibility of individuals to disease and whether individuals have the potential to transmit respiratory pathogens (i.e. contagiousness) to close contacts.

Q: Is DARPA asking proposers to find biomarkers that discriminate between infectious and non-infectious causes of acute respiratory illness? Or, is DARPA asking proposers to find biomarkers that discriminate between cases of acute respiratory infection who are likely to transmit (contagious) and those who are not likely to transmit (not contagious)?

A: The latter statement is more consistent with the BAA [is DARPA asking proposers to find biomarkers that discriminate between cases of acute respiratory infection who are likely to transmit (contagious) and those who are not likely to transmit (not contagious)?]

DARPA is interested in determining "the susceptibility of individuals to disease and whether individuals have the potential to transmit respiratory pathogens (i.e. contagiousness) to close contacts... By the end of the program, a minimal set of early host biomarkers will be identified in humans that correlate with and predict contagiousness < 24 hours after infection."